

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
HAZARDOUS WASTE MANAGEMENT PERMIT

Name of Permittee: US Steel Corporation, Midwest Plant

Facility Location: U.S. Route 12, Portage, Indiana

EPA Identification Number: INR 000 109 107

Issuance Date: _____

Expiration Date: _____

Authorized Activities

Pursuant to Indiana Environmental Statutes (IC 13) and the rules promulgated thereunder and codified in Title 329 of the Indiana Administrative Code, Article 3.1 (329 IAC 3.1), the State permit conditions (hereinafter called the permit) of the Resource Conservation and Recovery Act of 1976 (RCRA) permit are issued to United States Steel Corporation, Midwest Plant (hereinafter called the Permittee) to operate a hazardous waste landfill (Greenbelt II) located on U.S. Route 12, Portage, Indiana, Section 25, 35, and 36, Township 37, Range 7 West at latitude 87 degrees N and longitude 41 degrees W, Portage IN Quadrangle, on the U.S. Geological Survey topographic map.

The State RCRA program is authorized under 40 CFR Part 271 and Section 3006 of RCRA to administer the hazardous waste management program in lieu of the Federal program, including administration of most of the Hazardous and Solid Waste Amendments (HSWA) of 1984. Since the State of Indiana has not yet received authorization to administer the most recent hazardous waste program requirements under HSWA, additional permit conditions may be issued by the U.S. EPA to address these new requirements.

The Permittee is authorized to conduct the following hazardous waste management activities:

	STORAGE	X	TREATMENT	X	DISPOSAL
	Container		Tank		Injection Well
	Tanks		Surface Impoundments	X	Landfill
	Waste Pile		Incinerator		Land Application
	Surface Impoundment	X	Other		

Federal regulations 40 CFR Parts 260 through 270 have been incorporated by reference. Where exceptions to incorporated Federal regulations are necessary, these exceptions will be noted in the text of the State rule 329 IAC 3.1-1-7.

The conditions of this permit were developed in accordance with the following applicable provisions of 329 IAC 3.1:

- X ID & Listing of Hazardous Waste
329 IAC 3.1-6
40 CFR 261 Subparts A, B, C, D, and
Appendices I, II, III, VII, VIII, IX, X
- X Standards for Owners and Operators of
Treatment, Storage, and Disposal Facilities
329 IAC 3.1-9
40 CFR 264 Subparts A, B, C, D, and E
- X Ground Water Protection
329 IAC 3.1-9
40 CFR 264 Subpart F
- X Closure and Post-Closure
329 IAC 3.1-9
40 CFR 264 Subpart G
- X Financial Requirements
329 IAC 3.1-15
- Use and Management of Containers
329 IAC 3.1-9
40 CFR 264 Subpart I

- _____ Tank Systems
329 IAC 3.1-9
40 CFR 264 Subpart J
- _____ Surface Impoundments
329 IAC 3.1-9
40 CFR 264 Subpart K
- _____ Waste Piles
329 IAC 3.1-9
40 CFR 264 Subpart L
- _____ Land Treatment
329 IAC 3.1-9
40 CFR 264 Subpart M
- X_____ Landfills
329 IAC 3.1-9
40 CFR 264 Subpart N
- _____ Incinerators
329 IAC 3.1-9
40 CFR 264 Subpart O
- X_____ Corrective Action for Solid
Waste Management Units
329 IAC 3.1-9
40 CFR 264 Subpart S
- _____ Drip Pads
329 IAC 3.1-9
40 CFR 264 Subpart W
- _____ Air Emission Standards for
Process Vents
329 IAC 3.1-9
40 CFR 264 Subpart AA
- _____ Air Emission Standards for
Equipment Leaks
329 IAC 3.1-9
40 CFR 264 Subpart BB

_____ Air Emission Standards for Tanks
Surface Impoundments and Containers
329 IAC 3.1-9
40 CFR 264 Subpart CC

X Hazardous Waste Permit Programs
329 IAC 3.1-13
40 CFR 270 Subparts A, B, C, and D

X Inspection and Investigation
329 IAC 3.1-1-3 and 329 IAC 3.1-1-4

X Enforcement
329 IAC 3.1-1-5

Permit Approval

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any Attachments) and the applicable rules and requirements contained in 329 IAC 3.1 and 40 CFR 260 through 270 as specified in the permit. Applicable rules are those which are in effect on the date of issuance of this permit. (See 329 IAC 3.1-13; 40 CFR 270.32)

This permit is based on the assumption that the information submitted in the permit application attached to the Permittee's letter dated October 2, 2007, and any subsequent amendments (hereafter referred to as the application) is accurate and that the facility has been or will be constructed and/or operated as specified in the application. Any inaccuracies found in the application may be grounds for the modification, revocation, and reissuance, or termination of this permit (329 IAC 3.1-13-7), and potential enforcement action. The Permittee must inform the Indiana Department of Environmental Management (IDEM) of any deviation from, or changes in, the information in the application which would affect the Permittee's ability to comply with the applicable rules or permit conditions.

Pursuant to IC 13-15-5-3 and IC 4-21.5-3-5(f), this permit takes effect fifteen (15) days from receipt of this notice. If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a Petition for Administrative Review. If you seek to have the effectiveness of the permit stayed during administrative review, you must also file a Petition for Stay. The petition(s) must be submitted to the Office of Environmental Adjudication, Government Center North, Room 501, 100 North Senate Avenue, Indianapolis, Indiana 46204, within fifteen (15) days after your receipt of this notice. The petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 requires that a Petition for Administrative Review must include:

1. The name and address of the person making the request.
2. The interest of the person making the request.
3. Identification of any persons represented by the person making the request.
4. The reasons, with particularity, for the request.
5. The issues, with particularity, proposed for consideration at the hearing.

6. Identification of the terms of the permit which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing licenses of the type granted or denied by the Commissioner.

Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the Office of Environmental Adjudication. Filing of such a document is complete on the earliest of the following dates:

1. the date on which the petition is delivered to the Office of Environmental Adjudication, Government Center North, Room 501, 100 North Senate Avenue, Indianapolis, Indiana 46204;
2. the date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or
3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

The portions of the permit for which a Petition for Stay has been filed will take effect at the expiration of the additional fifteen (15) day period unless or until an Environmental Law Judge stays the permit in whole or in part. This permit shall remain in effect until five (5) years from the effective date unless revoked and reissued, modified, or terminated (329 IAC 3.1-13-7), or continued in accordance with IC 13-15-6-3.

This permit terminates and supersedes any other State hazardous waste management permit.

Issued this _____ day of _____ 2008.

By:

Thomas E. Linson, Chief
Permits Branch
Office of Land Quality

**United States Steel Corporation
Midwest Plant
Portage, Indiana
INR 000 109 017**

TABLE OF CONTENTS

	Page
<u>Permit Form</u>	
<u>Permit Conditions</u>	
I. Standard Conditions	8
II. General Facility Conditions	17
III. Corrective Action Conditions.....	22
IV. Landfill Conditions.....	33
V. Groundwater Monitoring Conditions.....	37
VI. Compliance Schedule Conditions.....	45
<u>Attachments</u>	
A. Part A Application	
B. Facility Description	
C. Waste Characteristics/Waste Analysis Plan	
D. Process Information	
E. Groundwater Monitoring	
F. Procedures to Prevent Hazards	
G. Contingency Plan	
H. Personnel Training	
I. Closure and Post-Closure Plan	
J. Corrective Action for Solid Waste Management Units	

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to operate Greenbelt II Landfill (hereinafter called the landfill) for the disposal of hazardous waste (F006 Wastewater treatment sludge from electroplating plant operations). Any disposal of hazardous waste not authorized in this permit or the regulations is prohibited.

Pursuant to 329 IAC 3.1 and 40 CFR 260 through 270 (for HSWA Provisions), compliance with the conditions of this RCRA Permit generally constitutes compliance for purposes of enforcement, with the Indiana Environmental Management Act and RCRA, as amended by HSWA, except for those requirements not included in the Permit which become effective by statute, or which are promulgated under 329 IAC 3.1 and 40 CFR Section 260 through 270, restricting the placement of hazardous wastes in or on the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of Federal, State, or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any Order issued or any action brought under Section 3013 or Section 7003 of RCRA; Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq.), commonly known as CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9606(a)), commonly known as SARA, or any other law providing for protection of public health or the environment. 329 IAC 3.1-13; 40 CFR 270.4; IC 13

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 329 IAC 3.1-13-7. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of the permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. In the event that a condition of this permit is stayed for any reason, all provisions of the permit severable from the stayed provisions shall take effect. With

regard to stayed provisions of the permit, the Permittee shall continue to comply with the related applicable standards and relevant permitted standards in 329 IAC 3.1-9 and 329 IAC 3.1-15 from the previously issued permit until final resolution of the stayed condition, unless the Commissioner of the Indiana Department of Environmental Management (Commissioner) determines that compliance with the related applicable and relevant standards would be technologically incompatible with other conditions of this permit which have not been stayed. 329 IAC 3.1-13; 40 CFR 270.32

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of the RCRA permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of IC 13 and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 329 IAC 3.1-13; 40 CFR 270.30(a); 270.61
2. Duty to Reapply. The Permittee shall submit a complete application for a new permit at least 180 days before this permit expires unless: a) the Permittee no longer wishes to operate a hazardous waste management facility or the Permittee is no longer required to have a RCRA permit, or b) permission for submittal on a later date has been granted by the Commissioner. 329 IAC 3.1-13; 329 IAC 3.1-13-3(h); 40 CFR 270.30(b)

The corrective action obligations contained in this permit will continue regardless of whether the facility continues to operate or ceases operation and closes. The Permittee must submit an application for permit reissuance at least 180 days before the expiration date of this permit pursuant to 40 CFR 270.10(h) unless: a) the permit has been modified to terminate the corrective action schedule of compliance and the Permittee has been released from the requirements for financial assurance for corrective action; or b) permission for a later date has been granted by the Commissioner. The Commissioner shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

3. Permit Expiration. The duration of this permit shall not exceed five (5) years from the effective date of the permit, except as provided by 329 IAC 3.1-13-15. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application for a new permit and through no fault of the Permittee, the Commissioner has not issued a new permit with an effective date under 329 IAC 3.1-13-14 on or before the expiration date of the previous permit. 329 IAC 3.1-13-16

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. 329 IAC 3.1-13; 40 CFR 270.30(c)
5. Duty to Mitigate. In the event of non-compliance with this Permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. 329 IAC 3.1-13; 40 CFR 270.30(d)
6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit. 329 IAC 3.1-13; 40 CFR 270.30(e)
7. Duty to Provide Information. The Permittee shall furnish to the Commissioner, within a reasonable time, any relevant information which the Commissioner may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Commissioner, upon request, copies of records required to be kept by this permit. 329 IAC 3.1-13; 40 CFR 270.30(h); 264.74
8. Inspection and Entry. Pursuant to 329 IAC 3.1-1-3 and 40 CFR 270.30(i), the Permittee shall allow the Commissioner, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
 - a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(1));
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(2));
 - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit (329 IAC 3.1-13; 40 CFR 270.30(i)(3)); and

- d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by IC 13, any substances or parameters at any location (329 IAC 3.1-13; 40 CFR 270.30(i)(4)).

9. Monitoring and Reporting.

- a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from 329 IAC 3.1-6; 40 CFR 261, Appendix I. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, (as referenced in 40 CFR 260.11); Standard Methods for the Examination of Water and Wastewater, (20th Edition, 1998); or an equivalent method as specified in the attached Waste Analysis Plan/and or Groundwater Monitoring Plan. 329 IAC 3.1-13; 40 CFR 270.30(j)(1)
- b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least three (3) years from the date of the sample, measurement, report, or record or for a period of time greater than three (3) years as specified elsewhere in this permit. Corrective Action records must be maintained at least 3 years after all Corrective Action activities have been completed. These periods may be extended by request of the Commissioner at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. 329 IAC 3.1-13; 40 CFR 270.30(j)(2) and 40 CFR 264.74(b)
- c. Pursuant to 329 IAC 3.1-13; 40 CFR 270.30(j)(3), records of monitoring information shall include:
 - i. The date(s), exact place, and times of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The individual(s) and laboratory who performed the analyses;

- v. The analytical technique(s) or method(s) used. Analytical technique(s) or method(s) is defined as encompassing both the sampling technique (method) and method of chemical analysis used. This information must be provided in the Waste Analysis Plan; and
 - vi. The result(s) of such analyses, including QA/QC documentation.
 - d. Monitoring results shall be reported to the Commissioner at the intervals specified elsewhere in this permit. 329 IAC 3.1-13; 40 CFR 270.30(1)(4)
- 10. Reporting Planned Changes. The Permittee shall give notice to the Commissioner as soon as possible of any planned physical alterations or additions to the permitted facility. 329 IAC 3.1-13; 40 CFR 270.30(1)(1)
- 11. Certification of Construction or Modification. Pursuant to 329 IAC 3.1-13; 40 CFR 270.30(1)(2), the Permittee may not treat, store or dispose of hazardous waste in a modified portion of the facility except as provided in 40 CFR 270.42 until:
 - (a) the Permittee has submitted to the Commissioner by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
 - (b)
 - (i) the commissioner has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or
 - (ii) the Commissioner has waived the inspection.
- 12. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 329 IAC 3.1-13; 40 CFR 270.40(b) or 40 CFR 270.41(b)(2) to identify the new Permittee and incorporate such other requirements as may be necessary under IC 13. Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 329 IAC 3.1 and IC 13, including all applicable corrective action requirements. 329 IAC 3.1-13; 40 CFR 270.40
- 13. Reporting Anticipated Noncompliance. The Permittee shall give advance notice to the Commissioner of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. Such notification does not excuse the Permittee's duty to comply with permit requirements. 329 IAC 3.1-13; 40 CFR 270.30(1)(2)

14. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date. 329 IAC 3.1-13; 40 CFR 270.30(1)(5)
15. Twenty-four Hour Reporting. The Permittee shall report to the Commissioner any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally to the IDEM 24 hour emergency telephone number 317/233-7745, within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. Pursuant to 329 IAC 3.1-13; 40 CFR 270.30(1)(6), this report shall include the following:
 - a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies.
 - b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:
 - i. Name, address, and telephone number of the owner or operator;
 - ii. Name, address, and telephone number of the facility;
 - iii. Date, time, and type of incident;
 - iv. Name and quantity of material(s) involved;
 - v. The extent of injuries, if any;
 - vi. An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
 - vii. Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps aken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

The Permittee need not comply with the five (5)-day written notice requirement if the Commissioner waives the requirement and the Permittee submits a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all instances of noncompliance not otherwise required to be reported under Condition I.D. 13-15, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in Condition I.D. 15. 329 IAC 3.1-13; 40 CFR 270.30(1)(10)
 17. Other Information. When the Permittee becomes aware that the facility failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Commissioner, the Permittee shall promptly submit such facts or information. 329 IAC 3.1-13; 40 CFR 270.30(1)(11)
 18. Submittal of Reports or Other Information. All reports or other information required to be submitted by the terms of this permit shall be sent to:

Commissioner
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46204-2241
Attention: Chief, Permits Branch
 19. All other requirements contained in RCRA, as amended, and in 40 CFR 270.30 not set forth herein are hereby fully incorporated in this permit.
- E. SIGNATORY REQUIREMENT All reports or other information requested by the Commissioner shall be signed and certified as required by 329 IAC 3.1-13; 40 CFR 270.11.
- F. CONFIDENTIAL INFORMATION The Permittee may claim confidential any information required to be submitted by this permit in accordance with 329 IAC 3.1-13-4, 329 IAC 6.1, and IC 13-14-11-1.
- G. WASTE MINIMIZATION

The Permittee shall certify at least annually that the Permittee has a program in place to reduce the volume and toxicity of hazardous waste that the Permittee generates to the degree determined by the Permittee to be economically practicable; and the proposed method of treatment, storage, or disposal is that practicable method currently available to

the Permittee which minimizes the present and future threat to human health and the environment, in accordance with 40 CFR 264.73(b)(9) and Section 3005(h) of RCRA, 42 U.S.C. §6925(h). The certifications shall be recorded, as they become available, and maintained in the operating record until closure of the facility.

H. DOCUMENTS TO BE MAINTAINED AT FACILITY SITE Except as noted in the regulations, the Permittee shall maintain at the facility, until closure is completed and certified by the owner/operator and an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

1. Waste Analysis Plan as required by 329 IAC 3.1-9, 40 CFR 264.13 and this permit and any document(s) referenced therein to describe on-site procedures.
2. Personnel training documents and records as required by 329 IAC 3.1-9, 40 CFR 264.16(d) and (e) and this permit.
3. Contingency Plan as required by 329 IAC 3.1-9, 40 CFR 264.53(a), and this permit.
4. Closure Plan as required by 329 IAC 3.1-9, 40 CFR 264.112(a)(2), and this permit.
5. Cost estimate for facility closure as required by 329 IAC 3.1-15-3, and this permit.
6. Operating record as required by 329 IAC 3.1-9, 40 CFR 264.73, and this permit.
7. Inspection schedules as required by 329 IAC 3.1-9, 40 CFR 264.15(b)(2), and this permit.
8. Record of facility inspections, as required by 329 IAC 3.1-9, 40 CFR 264.15(d), and this permit, shall be maintained for at least three years from the date of inspection per 40 CFR 264.15(d).
9. Copies of all manifests for shipments of hazardous waste received at and originating from this facility, as required by 329 IAC 3.1-7, 329 IAC 3.1-9-2(6) 40 CFR 262.40, 40 CFR 264.71, and this permit, shall be maintained for at least three years.
10. Notifications from generators subject to 40 CFR Part 268, Subtitle C, that specify treatment standards, as required by 40 CFR 264.73, 268.7, and this permit.
11. Waste minimization certifications must be part of the operating record as required by 40 CFR 264.73(b)(9).

12. Corrective Action reports and records as required by Permit Condition III of this permit. These reports and records must be maintained for at least 3 years after all Corrective Action Activities have been completed; and
13. Ground water monitoring data as required by 329 IAC 3.1-9, 40 CFR 264.97 and this permit.
14. Post-Closure Plan as required by 329 IAC 3.1-10, 40 CFR 264.118(c), and this permit.

II. GENERAL FACILITY CONDITIONS

- A. DESIGN AND OPERATION OF FACILITY The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, ground water or surface water which could threaten human health or the environment.
- B. GENERAL WASTE ANALYSIS The Permittee shall comply with the procedures described in the attached Waste Analysis Plan, Attachment C, which is incorporated herein by reference.
- C. SECURITY The Permittee shall comply with the security provisions of 329 IAC 3.1-9 and 40 CFR 264.14(b) and (c) as described in the Procedures to Prevent Hazards, Attachment F, which is incorporated herein by reference.
- D. GENERAL INSPECTION REQUIREMENTS The Permittee shall follow the inspection schedule in the Procedures to Prevent Hazards, Attachment F. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 329 IAC 3.1-9 and 40 CFR 264.15(c). Records of inspections shall be kept as required by 329 IAC 3.1-9 and 40 CFR 264.15(d).
- E. PERSONNEL TRAINING The Permittee shall conduct personnel training as required by 329 IAC 3.1-9 and 40 CFR 264.16. This training program shall follow the attached outline in the Personnel Training Plan, Attachment H, which is incorporated herein by reference. The Permittee shall maintain training documents and records as required by 329 IAC 3.1-9 and 40 CFR 264.16(d) and (e).
- F. RESERVED
- G. PREPAREDNESS AND PREVENTION
1. Required Equipment. The Permittee shall equip the facility with the equipment set forth in the attached Contingency Plan, Attachment G, which is incorporated herein by reference, and as required by 329 IAC 3.1-9 and 40 CFR 264.32.
 2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in Attachment G (see the previous permit condition) as necessary to assure its proper operation in time of emergency. Such testing and maintenance activities are set forth in the inspection schedule in Attachment F.

3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm systems as required by 329 IAC 3.1-9 and 40 CFR 264.34.
4. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 329 IAC 3.1-9 and 40 CFR 264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

H. CONTINGENCY PLAN

1. Implementation of Plan. The Permittee shall immediately comply with the provisions of the Contingency Plan, Attachment G, and follow the emergency procedures described by 329 IAC 3.1-9-2(4) and (5) and 40 CFR 264.56 whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which threatens or could threaten human health or the environment.
2. Copies of Plan. The Permittee shall comply with the requirements of 329 IAC 3.1-9 and 40 CFR 264.53.
3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the Contingency Plan, as required by 329 IAC 3.1-9 and 40 CFR 264.54.
4. Emergency-Coordinator. The Permittee shall comply with the requirements of 329 IAC 3.1-9 and 40 CFR 264.55, concerning the Emergency Coordinator.

I. RESERVED

J. RECORD KEEPING AND REPORTING In addition to the record keeping and reporting requirements specified elsewhere in this Permit, the Permittee shall comply with the following record keeping and reporting requirements:

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 329 IAC 3.1-9 and 40 CFR 264.73.
2. Sampling and Analysis Records. The Permittee shall keep original or exact copies of all sampling and analysis records. These records shall be kept in an orderly manner and available for inspection, in accordance with 329 IAC 3.1-9 and 40 CFR 264.74.
3. Biennial Report. The Permittee shall comply with the biennial report requirements of 329 IAC 3.1-9 and 40 CFR 264.75.

K. CLOSURE

1. Performance Standard. The Permittee shall close the facility as required by 329 IAC 3.1-9 and 40 CFR 264.111 and in accordance with the Closure Plan, Attachment I, which is incorporated herein by reference.
2. Amendment to Closure Plan. The Permittee shall amend the Closure Plan in accordance with 329 IAC 3.1-9 and 40 CFR 264.112(c) whenever necessary, and whenever requested by the Commissioner in accordance with 40 CFR 264.112(c)(4).
3. Notification of Closure. Pursuant to 329 IAC 3.1-9 and 40 CFR 264.112(d) the Permittee shall notify the Commissioner in writing at least sixty (60) days prior to the date he expects to begin closure of a landfill unit, or final closure of a facility.
4. Time Allowed for Closure. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the Closure Plan, Attachment I.
5. Disposal and/or Decontamination of Equipment. When closure is completed, the Permittee shall decontaminate and/or dispose of all facility equipment contaminated with hazardous waste as required by 329 IAC 3.1-9, 40 CFR 264.114 and the Closure Plan, Attachment I.
6. Certification of Closure. When closure is completed, the Permittee and an independent registered professional engineer shall certify to the Commissioner that the facility has been closed in accordance with the specifications in the Closure Plan as required by 329 IAC 3.1-9 and 40 CFR 264.115.

L. COST ESTIMATE FOR FACILITY CLOSURE The Permittee's closure cost estimate, prepared in accordance with 329 IAC 3.1-15-3, is specified in the Closure Plan, Attachment I.

1. When using the financial test or corporate guarantee, the Permittee must adjust the closure cost estimate for inflation within thirty (30) days after the close of the Permittee's fiscal year and before the submission of updated information to the Commissioner, as required by 329 IAC 3.1-15-3(b)
2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan as required by 329 IAC 3.1-15-3(c).

3. The Permittee must keep at the facility the latest closure cost estimate as required by 329 IAC 3.1-15-3(d).
- M. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE The Permittee shall demonstrate continuous compliance with 329 IAC 3.1-15-6 by providing documentation of financial assurance, as specified by 329 IAC 3.1-15-10, in at least the amount of the cost estimates required by 329 IAC 3.1-5-5. Changes in financial assurance mechanisms must be approved by the Commissioner pursuant to 329 IAC 3.1-15-16.
- N. FINANCIAL ASSURANCE FOR FACILITY CLOSURE The Permittee shall demonstrate continuous compliance with 329 IAC 3.1-15-4 by providing documentation of financial assurance when required, and as specified by 329 IAC 3.1-15-10, in at least the amount of the cost estimates required by Permit Condition II.L. Changes in financial assurance mechanisms must be approved by the Commissioner pursuant to 329 IAC 3.1-15-4.
- O. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS The Permittee shall comply with 329 IAC 3.1-15-9 whenever necessary.
- P. LIABILITY REQUIREMENTS The Permittee shall demonstrate continuous compliance with the requirements of 329 IAC 3.1-15-8 and the documentation requirements of 329 IAC 3.1-15-10, including the requirements to have and maintain liability coverage for sudden and nonsudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million for sudden accidental occurrences, and in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million for nonsudden accidental occurrences, exclusive of legal defense cost.
- Q. LAND DISPOSAL RESTRICTIONS
1. The Permittee shall comply with all the applicable self-implementing requirements of 40 CFR Part 268 and all applicable land disposal requirements which become effective by federal statute.
 2. The Permittee shall comply with the dilution prohibition requirements described in 40 CFR 268.3.
 3. The Permittee shall comply with all testing, tracking, and recordkeeping requirements for treatment facilities described in 40 CFR 268.7.
 4. The Permittee shall comply with all the applicable prohibitions on storage of restricted wastes specified in 40 CFR 268 Subpart E.

5. If the Permittee applies to the administrator of the EPA for an exemption from land disposal restrictions described in 329 IAC 3.1-12-2, the Permittee must submit copies of such request and all supporting documents to the commissioner. If the Permittee obtains an exemption from the administrator of the EPA, the Permittee must apply to the commissioner for concurrence that such an exemption is consistent with the policies outlined in IC 13.

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III. CORRECTIVE ACTION CONDITIONS

A. STANDARD REQUIREMENTS

1. Corrective Action At The Facility

In accordance with Section 3004(u) of RCRA (Indiana Code 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must institute Corrective Action as necessary to protect human health and the environment for all releases of hazardous waste(s) or hazardous constituent(s) from any solid waste management unit (SWMU) or area of concern (AOC) at the facility, regardless of the time the waste was placed in such units. The Permittee shall perform all such work in a manner consistent with, at a minimum, the Corrective Action Scope of Work found in Attachment J.

2. Corrective Action Beyond The Facility Boundary

In accordance with Section 3004(v) of RCRA (Indiana Code 13-22-2-5) and the regulations promulgated pursuant thereto, the Permittee must implement Corrective Action(s) beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates to the IDEM's satisfaction that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be addressed under the RCRA Facility Investigation, Corrective Measures Study, and Corrective Measures Implementation phases, as determined to be necessary on a case-by-case basis.

3. Notification

a. Field Activities

The Permittee shall notify IDEM at least seven (7) days before engaging in any field activities, such as well drilling, installation of equipment, or sampling. At the request of IDEM, the Permittee shall provide IDEM or its authorized representative split samples of all samples collected by the Permittee pursuant to this permit. Similarly, at the request of the Permittee, IDEM shall allow the Permittee or its authorized representatives to take split or duplicate samples of all samples collected by IDEM under this permit.

b. Submittals

Four (4) copies of all reports, plans, and other submissions relating to or required by this permit shall be sent to:

Indiana Department of Environmental Management
OLQ Permits Branch
100 N. Senate Avenue
Indianapolis, IN 46204
Attention: Chief, Hazardous Waste Permit Section

B. IDENTIFICATION OF SWMUs

1. Definitions

- a. “Area of Concern (AOC)” means a unit or area that could potentially produce unacceptable exposures or be a potential source of ground water contamination, but the unit or area does not meet the definition of a solid waste management unit.
- b. “Facility” means all contiguous property under the control of the owner/operator of a facility seeking a permit under Subtitle C.
- c. “Hazardous waste,” as defined in IC 13-11-2-99, means a solid waste or combination of solid wastes that may cause or significantly contribute to an increase in: mortality, serious irreversible illness, or an incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment. This term is further defined in 40 CFR Part 261.3.
- d. “Hazardous constituent” means any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264.
- e. “Release” means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous wastes or hazardous constituents into the environment, including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents.

- f. “Solid waste” means any garbage, refuse, sludge, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, or agricultural operations or from community activities. This term is further defined in 40 CFR Part 261.2.
- g. “Solid Waste Management Unit (SWMU)” means any discernable unit, permitted or unpermitted, existing or historical, at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

2. SWMUs and AOCs Requiring Corrective Action

Based on the information contained in the administrative record, corrective action is required at the SWMUs and AOCs listed below. A map showing the location of these SWMUs and AOCs is given in Attachment J.

SWMU/AOC Name	Corrective Action Required
Eastside SWMU	Either develop and implement an IDEM approved presumptive remedy as an alternative to a Corrective Measure Study (CMS) or proceed with a detailed CMS.
Chrome Plant SWMU	Submit a plan for delineating the nature and extent of ground water contamination.

C. NEWLY IDENTIFIED SWMUs OR RELEASES

1. Notification Requirements

The Permittee shall notify the IDEM, within thirty (30) days of discovery, of the following information requirements for any new SWMU identified at the facility, in accordance with 329 IAC 3.1-13-1 and 40 CFR 270.14(d):

- a. the location of the unit on the site topographic map;
- b. designation of the type of unit;
- c. general dimensions and structural description (supply and available drawings);

- d. when the unit was operated; and
- e. specifications of all waste(s) that have been managed at the unit.

2. Release Information

The Permittee must submit to the IDEM, within thirty (30) day of discovery, all available information pertaining to any release of hazardous waste(s) or hazardous constituent(s) from any new or existing SWMU.

3. Corrective Action

The IDEM will review the information provided in Condition III.C. 1 and 2 above, and may as necessary, require further investigations or corrective measures. The Permittee shall submit a written RFI Workplan to the Section Chief of the Hazardous Waste Permit Section in accordance with Condition III.D.2.

D. CORRECTIVE ACTION ACTIVITIES

The major tasks and required submittal dates are shown below. Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition III.F.).

1. Interim Measures (IM)

- a. The Permittee may undertake interim measure activities to prevent or minimize the further spread of contamination while long-term remedies are pursued. An IM Workplan shall be submitted to the IDEM for approval before the Permittee initiates any remedial activity. The interim measure(s) must be capable of being integrated into any long-term solution at the facility.
- b. In the event the Permittee identifies an immediate threat to human health or the environment, the Permittee shall immediately notify the Section Chief orally and in writing within seven (7) days summarizing the immediacy and magnitude of the potential threat to human health or the environment.

Upon receiving this information, the IDEM will determine if an IM Workplan is necessary. If one is necessary, the Section Chief will send a notice to the Permittee requiring the submission of an IM Workplan. Within twenty-one (21) days after receiving this notice, the Permittee shall submit to the Section Chief a workplan for approval that identifies the interim measure(s).

The workplan should be consistent with and integrated into any long-term solution at the facility. In addition, the following Interim Measure schedule shall be initiated:

- i. Within five (5) days, the Permittee shall provide an alternate water supply to parties that have a contaminated water supply well;
- ii. Within seven (7) days, the Permittee shall submit a report to the Section Chief detailing the activity pursued and a plan for further Interim Measures activity;
- iii. Within seven (7) days following the Section Chief's transmission of comments, the Permittee shall revise the plan in accordance with the comments; and
- iv. Within seven (7) days following the IDEM's approval or modification of the plan, the Permittee shall implement the revised plan in accordance with the schedule therein.

2. RCRA Facility Investigation (RFI)

The Permittee shall conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from all SWMUs and AOCs identified as requiring an RFI.

a. RFI Workplan

The Permittee shall submit a written RFI Workplan to the Section Chief within ninety (90) days after written notification by the Section Chief that further investigation is necessary.

The IDEM will approve, modify and approve, or disapprove and provide comments on the Workplan in writing to the Permittee. Within sixty (60) days of receipt of such comments, the Permittee shall provide a response to the IDEM's comments.

b. RFI Implementation

Within thirty (30) days of the IDEM's written approval of the RFI Workplan, the Permittee shall implement the plan according to the terms and schedule contained therein.

c. RFI Report

Within ninety (90) days after the completion of the RFI, the Permittee shall submit an RFI Report to the Section Chief. The RFI Report shall describe the procedures, methods, and results of the RFI. The report must contain adequate information to support further corrective action decisions at the facility. After the Permittee submits the RFI Report, the IDEM shall either approve or disapprove the report in writing. If the IDEM disapproves the report, the Section Chief shall notify the Permittee in writing of the deficiencies. The Permittee has thirty (30) days after receipt of the IDEM's comments to submit a revised RFI Report to the Section Chief.

3. Determination of No Further Action

a. Permit Modification

After completion of the RFI, and based on its results and other relevant information, the Permittee may submit an application to the Section Chief for a permit modification under 40 CFR 270.42 to terminate the corrective action tasks of the Corrective Action Activities Schedule for all or a portion of the facility. Tasks identified in Permit Condition III.F. for the SWMUs, solid waste management areas (a group of SWMUs in an area to be addressed as a single unit), and/or the AOCs identified in the modification (for a determination of no further action) shall be stayed pending a decision by IDEM. This permit modification must conclusively demonstrate that there are no releases of hazardous waste(s), including hazardous constituents, from SWMUs or AOCs at the facility that pose a threat to human health or the environment.

If, based upon review of the Permittee's request for a permit modification, the results of the completed RFI, and other information, IDEM determines that releases or suspected releases that were investigated either are nonexistent or do not pose a threat to human health or the environment, IDEM will grant the requested modification

b. Further Investigations

A determination of no further action shall not preclude the IDEM from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates that a release or likelihood of a release from a SWMU or AOC at the facility is likely to pose a threat to human health or the environment. In such a case, the

IDEM shall initiate a modification to the Corrective Action Activities Schedule to rescind the determination made in accordance with Permit Condition D.3.a. Additionally, the IDEM may determine that there is insufficient information on which to base a determination, and may require the Permittee to perform additional investigations as needed to generate the needed information.

4. Corrective Measures Study (CMS) and Remedy Selection

If the IDEM determines, based on the results of the RFI and other relevant information, that corrective measures are necessary, the Section Chief will notify the Permittee in writing that the Permittee shall conduct a CMS. The purpose of the CMS is to develop and evaluate the corrective action alternative(s) that will satisfy the performance objectives specified by the IDEM. The CMS shall be conducted within sixty (60) days of notification by the Section Chief that the CMS is required. This period of time may be extended by the Section Chief if necessary to adequately complete the CMS. Note that this process can be significantly shortened by the selection of presumptive remedies (i.e., remedies that are known to be effective). Additional tasks and associated submittal dates may also be specified in the Corrective Action Activities Schedule (Condition III.F.).

a. CMS Report

Within sixty (60) days after the completion of the CMS, the Permittee shall submit a CMS Report to the Section Chief. The CMS Report shall summarize the results of the investigations for each remedy studied and must include an evaluation of each remedial alternative. After the Permittee submits the CMS Report, the IDEM shall either approve, modify and approve, or disapprove the Report. If the IDEM disapproves the Report, the Section Chief shall notify the Permittee in writing of the deficiencies. The Permittee has thirty (30) days after receipt of the IDEM's comments to submit a revised CMS Report to the Section Chief. The CMS Report, as approved, becomes an enforceable condition of this permit.

b. CMS Remedy Selection

The IDEM will select a corrective measure for implementation based on the following factors. The corrective measure selected for implementation must: (1) be protective of human health and the environment; (2) attain media cleanup standards; (3) control the source(s) of releases so as to reduce or eliminate further releases of hazardous waste(s) (including

hazardous constituent(s)); (4) minimize the transfer of contamination from one environmental medium to another; and (5) comply with all applicable standards for management of wastes.

If two or more of the corrective measures studied meet the threshold criteria set out above, the IDEM will choose among alternatives for Corrective Measures Implementation by considering remedy selection factors including: (1) long-term reliability and effectiveness; (2) the degree to which the corrective measure will reduce the toxicity, mobility or volume; (3) the corrective measure's short-term effectiveness; (4) the corrective measure's implementability; and (5) the relative cost associated with the alternative. In selecting the corrective measure(s), the IDEM may also consider such other factors as may be presented by site-specific conditions.

5. Permit Modification

Within thirty (30) days of IDEM's selection of a corrective measure, IDEM or the Permittee will initiate a permit modification, pursuant to 40 CFR 270.41 or 40 CFR 270.42, respectively, for the implementation of the corrective measure(s) selected.

6. Corrective Measures Implementation (CMI)

a. If the corrective measure(s) recommended in the Corrective Measures Study Report is (are) not the corrective measure(s) selected by IDEM after consideration of public comments, the Section Chief shall inform the Permittee in writing of the reasons for such decision. Thirty (30) days after the effective date of the permit modification, the Permittee shall implement the corrective measure(s).

b. Financial Assurance

As part of the permit modification of this permit to incorporate the CMI, the Permittee shall provide financial assurance in the amount specified by the IDEM for necessary corrective action activities as required by 40 CFR 264.101(b) and (c).

7. Incorporation of plans and reports

All approved plans and reports prepared for this permit shall be incorporated into this permit on the date the Section Chief or his/her designee approves such plan or report.

E. DISPUTE RESOLUTION

1. If IDEM disapproves or modifies and approves any submission required by Condition III of the permit, IDEM shall provide the Permittee with a written notice setting forth the reasons for the disapproval or modification and approval.
2. If the Permittee disagrees, in whole or in part, with any written decision concerning IDEM's disapproval or modification and approval of any submission required by Condition III of the permit, the Permittee shall notify IDEM of the dispute. The Permittee and IDEM shall informally, and in good faith, endeavor to resolve the dispute.
3. If the Permittee and IDEM cannot resolve the dispute informally, the Permittee may pursue the matter formally by submitting a written statement of position to the Commissioner or his/her designee, within twenty-eight (28) days of receipt of IDEM's written disapproval or modification and approval. The Permittee's statement of position shall set forth the specific matters in dispute, the position that the Permittee asserts should be adopted as consistent with the requirements of the permit, the basis for the Permittee's position, and shall include any supporting documentation. If the Permittee fails to follow any of the requirements contained in this paragraph, then it shall have waived its right to further consideration of the disputed issue.
4. IDEM and the Permittee shall have an additional fourteen (14) days from the date of the Commissioner's receipt of the Permittee's statement of position to meet or confer to attempt to resolve the dispute. This time period may be extended by IDEM for good cause. If agreement is reached, the Permittee shall submit a revised submission, if necessary, and shall implement the submission in accordance with such agreement.
5. If the IDEM and the Permittee are not able to reach agreement within the 14-day period, or such longer period corresponding to IDEM's extension for good cause, the Permittee may submit any additional written arguments and evidence not previously submitted, or further explain any arguments or evidence previously submitted, to the Commissioner. Based on the record, the Commissioner, or delegate, will thereafter issue a written decision that shall include a response to the Permittee's arguments and evidence. This written decision will constitute final agency action.

6. Notwithstanding the invocation of this dispute resolution procedure, the Permittee shall proceed to take any action required by those portions of the submission and of the permit that IDEM determines are not substantially affected by the dispute. The activity schedule for those portions of the submission and of the permit which are substantially affected by the dispute shall be suspended during the period of dispute resolution.

F. CORRECTIVE ACTION ACTIVITIES SCHEDULE

<u>Activity</u>	<u>Due Date</u>
1. IM Workplan	30 days after notice by the Section Chief or his/her designee
2. RFI Workplan	90 days after effective date of permit
3. Notification of newly identified SWMUs	30 days after discovery
4. RFI Workplan for newly identified SWMUs	90 days after receipt of Section Chief's notification
5. RFI Workplan modification	60 days after receipt of Section Chief's comments
6. RFI Implementation	30 days after RFI Workplan approved
7. RFI Report	90 days after completion of RFI
8. RFI Report Modification	30 days after receipt of Section Chief's comments
9. Progress Reports on Tasks I through IV (See Corrective Action Scope of Work)	Yearly, on the last day of January of each year after effective date of permit
10. CMS Report	60 days after receipt of Section Chief's notification
11. CMS Report modification	30 days after receipt of Section Chief's comments

<u>Activity</u>	<u>Date Due</u>
12. Permit Modification for Corrective Measure Implementation	30 days after receipt of Section Chief's notification (Modification may be a Class 1, 2, or 3 at Section Chief's discretion)
13. CMI Program Plan	30 days after effective date of permit modification
14. CMI Program Plan Modification	30 days after receipt of Section Chief's comments
15. CMI Reports	Quarterly until construction of corrective measure is complete
16. CMI Report Modification	30 days after receipt of Section Chief's comments
17. Operation and Maintenance Progress Reports	Quarterly, on the tenth day of January, April, July, and October of each year after effective date of permit

IV. LANDFILL CONDITIONS

A. WASTE IDENTIFICATION

1. The Permittee may only dispose of the following hazardous wastes at the landfill, subject to the terms of this permit.

<u>EPA CODE</u>	<u>DESCRIPTION</u>
F006	Wastewater treatment sludges from electroplating operations except from the following operations: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating; (6) chemical etching and milling of aluminum.

2. The Permittee is prohibited from disposing of hazardous waste that is not identified in Permit Condition VI.A.1.
3. The Permittee may only dispose of hazardous wastes identified in Permit Condition VI.A.1 in the following landfill and/or landfill cell:

<u>Landfill and/or Landfill Cell Designation</u>	<u>Capacity</u>
Greenbelt II	approximately 1.17 million cubic yards

- B. The landfill is located in the area as shown in the Facility Description, Attachment B, incorporated herein by reference.

C. DESIGN REQUIREMENTS 329 IAC 3.1-9, 40 CFR 264.301:

The Permittee shall design and operate the landfill under the following conditions:

1. The Permittee shall install two liners and a leachate collection and removal system (one above and one between the liners) for each cell, in accordance with the design plans and reports contained in Attachment D. (40 CFR 264.301(c))

2. Collected leachate must be managed in accordance with the design plans and reports contained in Permit Attachment D.
3. The Permittee shall locate, construct, operate, and maintain the landfill as specified in Attachment D, so as to prevent the migration of any hazardous constituents into the ground water or surface water, at least as effectively as the liners and leachate collection and removal systems outlined in 40 CFR 264.301(c). (40 CFR 264.301(d))
4. The Permittee shall design, construct, operate, and maintain a run-on control system in accordance with the design plans, specifications and operating practices contained in Attachment D. (40 CFR 264.301(g))
5. The Permittee shall design, construct, operate, and maintain a run-off management system in accordance with the design plans, specifications, and operating practices contained in Attachment D. (40 CFR 264.301(g))
6. The Permittee shall empty or otherwise manage run-on and run-off collection and holding facilities to maintain the design capacity of the system(s) in accordance with the design plans and operating practices specified in Attachment D. (40 CFR 264.301(h))
7. The Permittee shall cover or otherwise manage the landfill to control wind dispersal of particulate matter, in accordance with the methods specified in Attachment D. (40 CFR 264.301(j))

D. INSPECTION SCHEDULES AND PROCEDURES

The Permittee shall inspect the landfill in accordance with the following conditions:

1. The Permittee shall inspect the liners and cover systems during construction and installation for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). (40 CFR 264.303(a))
2. The Permittee shall inspect the landfill immediately after construction or installation. (40 CFR 264.303(a))
 - a. Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

- b. Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of the liner or cover.
- 3. The Permittee shall inspect the landfill (including the liner and leachate collection system) in accordance with the inspection schedule specified in Attachment F. (40 CFR 264.303(b)) Items for inspection include:
 - a. Deterioration, malfunctions, or improper operation of run-on and run-off systems.
 - b. Proper functioning of wind dispersal control systems (if applicable).
 - c. The presence of leachate in, and proper functioning of, leachate collection and removal systems (if applicable).

E. SURVEYING AND RECORD KEEPING 329 IAC 3.1-9, 40 CFR 264.309

The owner or operator of a landfill must maintain a map, the exact location and dimensions, including depth, of each cell with respect to permanently surveyed benchmarks in the operating record required in 329 IAC 3.1-9 and 40 CFR 264.73:

F. CLOSURE AND POST-CLOSURE 329 IAC 3.1-9, 40 CFR 264.310

The Permittee shall conduct closure and post-closure activities in accordance with the following conditions:

- 1. At final closure of the landfill, or upon closure of any cell, the Permittee shall follow the procedures in the approved closure plan contained in Attachment I. (40 CFR 264.310(a)) At final closure of the landfill or upon closure of any cell, the owner or operator must cover the landfill or cell with a final cover designed and constructed to:
 - a. Provide long-term minimization of migration of liquids through the closed landfill;
 - b. Function with minimum maintenance;
 - c. Promote drainage and minimize erosion or abrasion of the cover;
 - d. Accommodate settling and subsidence so that the cover's integrity is maintained; and

- e. Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.
2. After final closure, the Permittee shall follow the plans and procedures in the approved Post-Closure Care Plan in Attachment I. (40 CFR 264.310(b)) After final closure, the owner or operator must comply with all post-closure requirements contained in 329 IAC 3.1-9 and 40 CFR 264.117 through 40 CFR 264.120, including maintenance and monitoring throughout the post-closure care period. The owner or operator must:
- a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cover as necessary to correct the effects of settling, subsidence, erosion, or other events;
 - b. Maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of 329 IAC 3.1-9 and 40 CFR 264 Subpart F;
 - c. Prevent run-on and run-off from eroding or otherwise damaging the final cover; and
 - d. Protect and maintain surveyed benchmarks used in complying with 329 IAC 3.1-9 and 40 CFR 264.310.

G. SPECIAL LANDFILL PROVISIONS FOR LIQUID WASTE

- 1. The Permittee shall not place bulk or non-containerized liquid wastes or waste containing free liquids in a landfill. (40 CFR 264.314(b))
- 2. The Permittee shall demonstrate the absence of free liquids in either a containerized or a bulk waste by the following test: "Method 9095 (Paint Filter Liquids Test)" as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846).

V. GROUND WATER MONITORING PERMIT CONDITIONS

A. GROUND WATER MONITORING DETECTION PROGRAM – OVERVIEW

The following permit conditions describe ground water monitoring procedures for implementation of the RCRA Part B Permit ground water monitoring detection program for the Greenbelt II Landfill located at the United States Steel Corporation, Midwest Plant facility in Portage, Indiana. In all cases, permit conditions supersede conflicting information found elsewhere. The ground water monitoring program is designed to detect a release of hazardous constituents from the disposal of F006 sludge.

Historical analytical results and statistical analyses of ground water samples collected from monitoring wells adjacent to the Greenbelt II area demonstrate that a release of hazardous constituents to the ground water has not occurred. Accordingly, the Permittee shall implement a ground water detection monitoring program consistent with the ground water monitoring requirements described at 40 CFR 264.97, 40 CFR 264.98, and as specifically described herein.

The ground water detection monitoring program will monitor ground water quality at the point of compliance encompassing the Greenbelt II Landfill. The current horizontal point of compliance encompasses the Greenbelt II area and is illustrated on the topographic map contained in Appendix E-5. Vertically, the point of compliance extends from the saturated sands of the Atherton Formation (approximately 595 ft above mean sea level) down through interbeds of sand and silt loam to the top of the Lagro Till Formation (approximately 515 ft above mean sea level).

For the purpose of detection monitoring, ground water flow in the uppermost aquifer is subdivided into three (3) discrete monitoring intervals as Zone A (shallow), Zone B (intermediate) and Zone C (deep). The hydrogeology of the Greenbelt area is summarized and documented in the following Appendices:

- Appendix E-1 Hydrogeologic Assessment Report, February 1993;
- Appendix E-2 Addendum to Hydrogeologic Assessment Greenbelt II Landfill Cell A, October 1993;
- Appendix E-3 November 1997 Hydrogeologic Investigation, February 27, 1998; and
- Appendix E-4 Supplemental Hydrogeologic Investigation (June 1999), August 26, 1999.

Ground water samples from the ground water detection monitoring system will be collected semi-annually. The ground water in each detection monitoring well will be sampled for the indicator parameters and monitoring constituents.

Ground water surface elevations will be determined in each compliance detection monitoring well and piezometer to determine ground water flow directions and velocities within the uppermost aquifer at the point of compliance.

All ground water samples will be collected and analyzed in accordance with the procedures specified in the designated sampling and analysis plan and quality assurance project program.

Ground water indicator parameter concentrations will be statistically evaluated semi-annually for evidence of a release of hazardous constituents to the ground water. Intrawell parametric or non-parametric prediction limit procedures will be used to make these evaluations.

Ground water data, evaluations, notifications, will be submitted on a timely basis as prescribed elsewhere.

Specific information concerning the ground water detection monitoring program is described in detail below.

B. GROUND WATER DETECTION MONITORING SYSTEM

1. Existing Monitoring Wells and Piezometers. The Permittee will maintain a ground water monitoring system consisting of detection monitoring wells and piezometers. Current detection monitoring system components are identified in Table E-2 of Attachment E and located on the topographic map in Appendix E-5.
2. Installation of New Soil Borings, Monitoring Wells and Piezometers
 - a. All future soil borings and monitoring well installation will be performed in accordance with the procedures described in Appendices E-8 (Procedures for Installing Soil Borings and Monitoring Wells) and IDEM Unconsolidated Deposit Descriptive Requirements.
 - b. Except as provided at permit condition V.B.2.c, the Permittee will follow the procedures at 40 CFR 270.42 to make modifications to the ground water detection monitoring program.
 - c. In lieu of a permit modification as required by permit condition V.B.2.b, the current ground water detection monitoring system and point of compliance may be revised to accommodate the expansion (disposal of waste in Cell "D") of the Greenbelt II landfill. Revisions will be made in accordance with the following procedures:

- 1) At least **two hundred and forty (240) days** prior to implementing changes in the permitted ground water detection monitoring system and point of compliance, obtain written approval from the OLQ, Geology Section for installing additional soil borings to locate new detection monitoring wells.
- 2) Within **forty-five (45) days** of receipt of written approval for locating new soil borings, install soil borings.
- 3) Review and interpret soil boring information acquired by Permit Condition V.B.2.c.2. Specific activities to be undertaken include:
 - a) Review field and laboratory results for new soil borings.
 - b) Identify primary flow pathways.
 - c) Correlate new information with existing hydrogeologic interpretations.
 - d) Revise hydrogeologic cross-sections to include new stratigraphic information.
 - e) Revise ground water flow maps and hydrogeologic flow nets using the most current data available.
 - f) Determine optimal horizontal and vertical locations for new compliance detection monitoring wells.
 - g) Determine monitoring wells that will be abandoned.
 - h) Identify changes to the current ground water monitoring detection system and point of compliance.
 - i) Identify relevant portions of the current permit that require modification to keep the permit current.
- 4) Within **sixty (60) days** of the installation of new soil borings, submit for approval to the OLQ, Geology Section a complete and accurate report documenting the information and interpretations required at permit condition V.B.2.c.3.
- 5) Within **sixty (60) days** of receipt of written approval for the report required at Permit Condition V.B.2.c.4, install new detection compliance monitoring wells.
- 6) Within **sixty (60) days** of the completion of the installation of new monitoring wells, submit a complete report to the OLQ, Geology Section documenting all changes to the permitted ground water monitoring detection program. This report must identify all changes to the effective permit. At a minimum, the report must identify and document the following:
 - a) Affective portions of the existing permit requiring revision(s) not limited to:
 - Permit Condition V.A. For future reference, the Permittee will add the report submitted in compliance with this permit condition to the list of existing hydrogeologic reports.

- Attachment E, Tables E-2 and E-3.
 - Appendix E-5 illustrating the location of new monitoring system components and point of compliance on the topographic map.
 - Appendix E-6 including: Table 1, Figure 1 and Appendix B.
- b) Draft, page by page revisions (both digital and hard copies) to replace existing portions of the permit being changed including: permit conditions, sections, appendices, attachments, tables, exhibits and figures, etc.

The report to be submitted in compliance with this permit condition is subject to IDEM review and approval. If necessary, any omission, error and/or deficiencies will be corrected by the Permittee. Corrections (both digital and hard copies) will be provided to the IDEM within thirty (30) days of receipt of written request.

This report will serve to provide formal notification to the IDEM Commissioner that all changes to the permitted ground water detection monitoring system are complete and that the revised monitoring system is operational.

- 7) Within **forty-five (45) days** of receipt of approval for the report required at Permit Condition V.B.2.c.6, the Permittee will submit documentation to demonstrate that ground water detection monitoring wells approved for abandonment at Permit Condition V.B.2.c.3 have been abandoned. Detection monitoring wells being removed from the permitted ground water monitoring system will be abandoned in accordance with the requirements of 312 IAC 13.

C. INDICATOR PARAMETERS AND MONITORING CONSTITUENTS

Ground water indicator parameters and monitoring constituents are specified in Table E-1 of Attachment E. Except for sulfate, monitoring constituents will be determined in the field at the well head.

D. SAMPLING AND ANALYSIS PROCEDURES

The Permittee will use the procedures described in the sampling and analysis plan (SAP) at Appendix E-6 to collect, preserve, control and analyze all ground water samples. The ground water monitoring system (monitoring wells and piezometers) and sampling equipment will be inspected and maintained according to the inspection and maintenance schedule described in the SAP and elsewhere in the permit.

E. MONITORING FREQUENCY

Using the sampling and analysis procedures specified at Permit Condition V.D, the Permittee will:

1. Semi-annually sample the ground water and analyze samples for each indicator parameter and monitoring constituent in Permit Condition V.C in each ground water detection monitoring well identified in Permit Condition V.B. Ground water samples will be collected semi-annually during the active life of the unit, including the closure and post-closure period. Lost or broken samples will be collected within forty-five days of the initial sample date.
2. When necessary, verification and Appendix IX ground water samples will be collected within the timeframes specified in Attachment E.

F. EVALUATION OF THE GROUND WATER SURFACE

Each time ground water samples are collected the Permittee will measure the static water level and determine the ground water elevation in each detection monitoring well and piezometer specified in Table E-2 of Attachment E. The Permittee will use the ground water elevations to determine flow rate and direction in each of the three monitoring intervals (A, B and C) within the uppermost aquifer. Ground water flow rates and directions will be evaluated according to the procedures described in Sections E-7d(8)(k) and (n).

G. STATISTICAL EVALUATION PROCEDURES

Historical background concentrations for each indicator parameter and compliance monitoring well will be archived in Appendix E-7 and summarized in Table E-3, Attachment E. Intrawell prediction limits are specified in Table E-3, Attachment E. The background data set will be updated at each two-year anniversary according to the schedule and procedures described in Section E-6d(8).

Following each semi-annual ground water sampling event, the Permittee will determine whether there is statistically significant evidence of contamination in the ground water at the point of compliance. This determination will be accomplished using the non-parametric intrawell Prediction Limit procedures specified in Section E-6d(5). Each indicator parameter in Table E-1 in each monitoring well of Table E-2, will be compared with the appropriate prediction limit specified in Table E-3, Attachment E.

H. RECORDKEEPING AND REPORTING

1. Within **forty-five (45) days** of receipt of laboratory analytical results for each semi-annual, verification, or Appendix IX ground water sampling event, the Permittee will:

- a. Complete the evaluations required at Permit Conditions V.F and V.G.
 - b. Enter all detection ground water monitoring information into the facility record including: all field and laboratory analytical results, ground water flow evaluations, statistical calculations, inspection and maintenance records. Specific information to be entered is described at Section E-7d(8).
 - c. Submit a complete report of the information specified at Section E-7d(8) to the OLQ, Geology Section Chief.
 - d. At each two (2) year anniversary when the background data set at Appendix E-7 is updated, recalculate and submit to the OLQ, Geology Section Chief, revised prediction limits for each ground water indicator parameter in each monitoring well. Additionally, the information contained in Table E-3, Attachment E will be revised and resubmitted. In doing so, the Permittee will demonstrate that background data continue to meet the assumptions of the statistical evaluation procedure.
2. If statistical comparisons required in Permit Condition V.G continue to be “SATISFIED” indicating that statistical evidence of contamination does not exist, the Permittee will continue to implement the ground water indicator monitoring program as described above.
 3. However, if any indicator parameter sample concentration is evaluated to be statistically greater than the corresponding intrawell prediction limit, the test is “TRIGGERED” indicating that statistical evidence of ground water contamination may be present. For any trigger that occurs, the Permittee will subsequently verify the trigger by collecting verification resamples according to the procedures described at Section E-6d(6).
 4. If statistical evidence of ground water contamination at the point of compliance is verified, the Permittee from the date of verification will:
 - a. Within **seven (7) days**, notify the IDEM Commissioner of this finding in writing. The notification must indicate what chemical parameters or constituents have shown statistically significant evidence of impacts.
 - b. Within **thirty (30) days**, sample the ground water in all monitoring wells and determine whether constituents in the list of Appendix IX of Part 40 CFR 264 identified in Section E-7e(2) are present and if so, their concentrations. The list of Appendix IX ground water monitoring constituents will be revised to include hazardous constituents contained in any remediation wastes to those already specified. The revised list will be submitted to the Hazardous Waste Section Chief, thirty (30) days prior to the disposal of any remediation

waste in Greenbelt II landfill. Within **seventy-five (75) days** of sampling for constituents on the Appendix IX ground water monitoring list, the Permittee will submit the results of this evaluation and the information required at Section E-7d(8) to the OLQ, Geology Section Chief.

- c. Within **one hundred and five (105) days**, the Permittee may re-sample the ground water and repeat the analyses for those compounds detected at Permit Condition V.H.4.b.
- d. Within **one hundred and fifty (150) days**, evaluate the analytical sampling results obtained at Permit Condition V.H.4.c and determine if Appendix IX compounds found during the initial Appendix IX analyses are present. Within **one hundred and sixty-five (165) days**, the Permittee will submit the results of this evaluation and the information at Section E-7d(8) to the OLQ, Geology Section Chief. If the Permittee determines on the basis of this evaluation that hazardous constituent(s) are not present in the ground water, the Permittee will continue with the ground water detection monitoring program as described above. However, if the Permittee confirms on the basis of laboratory analytical results that Appendix IX hazardous constituents are present in the ground water, the Permittee will, within **two hundred and forty (240) days** of the confirmation, submit to the OLQ, Permit Section an application for a permit modification to establish a compliance monitoring program. The application must include the information described in Section E-7e(4).
- e. Within **one hundred and eighty (180) days**, submit a corrective action feasibility plan in accordance with the requirements of 40 CFR 264.100 to the IDEM Commissioner.
- f. If the Permittee wishes to demonstrate that a source other than the landfill caused the increase, the Permittee will follow the procedures described in Section E-7e(7).
- g. The Permittee may demonstrate that a source other than the RCRA landfill caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. The Permittee may make this demonstration in addition to, or in lieu of, submitting a permit modification application for a ground water compliance monitoring program. However, the Permittee is not relieved of the requirement to establish background concentrations for each Appendix IX compound determined to be present in the ground water within the required time frame or to submit a permit modification application within the specified period unless the demonstration made under this permit condition successfully shows that a source other than the landfill caused the detection, or that detection resulted from error in sampling, analysis, or evaluation. In such cases, the Permittee from the date of confirming the presence of Appendix IX hazardous constituents in the ground water will:
 - 1) **Within seven (7) days**, notify the IDEM Commissioner that the Permittee intends to make a demonstration.

- 2) **Within ninety (90) days**, submit a report to the IDEM Commissioner that demonstrates that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation.
- 3) **Within ninety (90) days**, submit to the IDEM Commissioner an application for a permit modification to make any appropriate changes to the detection monitoring program at the facility.
- 4) Continue to monitor in accordance with the detection monitoring program at the facility.

VI. COMPLIANCE SCHEDULE CONDITIONS

1. Following the September-October 2008 sampling event, the Permittee shall revise Appendix E-7 (Summary of Ground Water Monitoring Data) and Table E-3 (Summary of Existing Background Data) for each ground water indicator parameter and submit the required information in the routine semi-annual ground water monitoring report as described in Permit Condition V.H.1.